

GOGALNICEANU, S.; CIOFU, A.; CHIRILA, R.

Iodine microdosing in plants. Studii cerc biochimie 7 no.2:191-193 '64.

1. "N. Balcescu" Agronomic Institute, Bucharest. Submitted September 26, 1963.

GOGANOV, A. I.

25520. Mekhanika Uprugo-Vyazko-Plasticheskiy Tel IV Rastyazhenie I Szhatiye Prizmy  
Zhurnal Tekh. Fiziki, 1949, VYP 8, c 892-910

SO: Letopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

GOGANOV, A. V.

GOGANOV, A. V. - "Methods of Postsowing Care for Summer Grain Crops on Sod-Podzolic Loamy Soils." Sub 5 Jun 52, All-Union Sci Res Inst of Fertilizers, Agricultural Engineering and Soil Sciences. (Dissertation for the Degree of Candidate in Agricultural Sciences).

SO: Vechernaya Moskva January-December 1952

ACCESSION NR: AT4019283

S/0000/63/003/001/0044/0046

AUTHOR: Goganov, D. A.; Poray-Koshits, Ye. A.; Sokolov, Yu. G.

TITLE: Detection and study of very small heterogeneities in glass by means of a new small-angle x-ray apparatus

SOURCE: Simpozium po stekloobraznomu sostoyaniyu. Leningrad, 1962. Stekloobraznoye sostoyaniye, vyyp. 1: Katalizirovannaya kristallizatsiya stekla (Vitreous state, no. 1: Catalyzing crystallization of glass). Trudy\* simpoziuma, v. 3, no. 1. Moscow, Izd-vo AN SSSR, 1963, 44-46

TOPIC TAGS: glass, x-ray analysis, lithium glass, borosilicate glass, lithium silicate, light scattering, glass crystallization, glass structure

ABSTRACT: A new apparatus was developed for recording very low intensities during the x-ray study of the submicroscopic structure of glass. The apparatus based on the previously known collimation device, also includes a proportional quantum counter and an amplitude analyzer. The apparatus and its advantages are described. Sodium borosilicate glass, containing 7%  $\text{Na}_2\text{O}$ , 23%  $\text{B}_2\text{O}_3$  and 70%  $\text{SiO}_2$  (mol.%) was used as the test material. When the intensity curves were plotted for three samples heated at different temperatures (600, 530 and 750C) for different lengths of time, the dimensions of the heterogeneous areas were found to be 55Å.

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In order to measure lower intensities, two lithium silicate glass samples containing 23.5 Li<sub>2</sub>O and 76.5% SiO<sub>2</sub> or 25.5% Li<sub>2</sub>O and 74.5% SiO<sub>2</sub>, respectively, were investigated. By comparing the intensity of small angle scattering with the intensity of the incident light beam, the absolute value of the scattering intensity, and hence the value of the mean square difference in electron density (this being a quantitative measure of chemical heterogeneity) could readily be determined with the new device. The precrystallization structure of glass and its effect on the initial stage of crystallization can also be investigated by this apparatus. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 17May63

DATE ACQ: 21Nov63

ENCL: 00

SUB CODE: MT

NO REF SOV: 002

OTHER: 001

Card 2/2

ACCESSION NR: AT4019284

S/0000/63/003/001/0046/0053

AUTHOR: Andreyev, N. S.; Goganov, D. A.; Poray-Koshits, Ye. A.; Sokolov, Yu. G.

TITLE: The chemically heterogeneous structure of binary sodium and lithium silicate glass

SOURCE: Simpozium po stekloobraznomu sostoyaniyu. Leningrad, 1962. Stekloobraznoye sostoyaniye, vy\*p. 1: Katalizirovannaya kristallizatsiya stekla (Vitreous state, no. 1: Catalyzing crystallization of glass). Trudy\* simpoziuma, v. 3, no. 1. Moscow, Izd-vo AN SSSR, 1963, 46-53

TOPIC TAGS: crystal heterogeneity, x-ray diffraction, lithium glass, glass silicate, sub-microscopic structure, binary system, glass structure

ABSTRACT: The binary systems  $\text{Na}_2\text{O}-\text{SiO}_2$  and  $\text{Li}_2\text{O}-\text{SiO}_2$  were investigated by roentgenographic techniques. In order to improve the characterization of the submicroscopic structure of glass, in addition to the size of the heterogeneous regions, the mean square difference in their electron densities was determined as a measure of the degree of heterogeneity. The mathematical approach to this is described. The composition conditions of thermal treatment and preparation of the test samples are given. Sodium silicate glass containing 11.5-18.5% mol. %  $\text{Na}_2\text{O}$  was used. A characteristic feature of all test samples was their ability to become opalescent after thermal treatment. When the relationship between cloudiness

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ACCESSION NR: AT4019284

and temperature was plotted, the temperature at which opalescence disappeared (785 C for a glass containing 14 mol. % Na<sub>2</sub>O) was found to be inversely proportional to the Na and Li content. The intensity of small-angle x-ray scattering is an accurate indication of the heterogeneity of sodium and lithium silicate glass. The way in which this scattering varies with the composition and thermal treatment was investigated, and the critical temperature beyond which the heterogeneity increased with increasing temperature was determined. Whereas the mean square difference of the electron densities decreases regularly with the Li<sub>2</sub>O content, in the case of sodium it first increases, reaching a maximum at about 11.5 mol. % Na<sub>2</sub>O. "The authors thank Ye. V. Podushko for fusing the glass containing 5-10 mol. % Na<sub>2</sub>O in a high-frequency electric furnace." Orig. art. has: 6 figures, 1 table and 6 formulas.

ASSOCIATION: none

SUBMITTED: 17May63

SUB CODE: MT

DATE ACQ: 21Nov63

NO REF SOV: 013

ENCL: 00

OTHER: 006

Card 2/2

L 13383-63 EPE/EWT(1)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pa-4/Pq-4 WW/WE

ACCESSION NR: AP3002744

8/0120/63/000/003/0155/0160

AUTHOR: Goganov, D.A.; Poray-Koshits, Ye. A.; Sokolov, Yu. G.

TITLE: Small-angle chamber with a proportional x-ray counter

SOURCE: Pribery\* 1 tekhnika eksperimenta, no. 3, 1963, 155-160

TOPIC TAGS: small-angle chamber, x-ray counter

ABSTRACT: A new demountable proportional counter of x-ray quanta and a special small-angle chamber are described. Two counter versions, argon-filled and xenon-filled, were built and operated in conjunction with a calcium purifier. The counter pulses were fed to a USh-2 amplifier (overall gain  $3 \times 10^6$ ), thence to a single-channel kick sorter, and finally to a scaler. The steel chamber enclosed a 100-micron-wide collimator and had 0.25-mm-thick inlet and outlet beryllium windows. The outfit was used for determining diffraction patterns of sodium-borosilicate and lithium-silicate glass that contained micro-inhomogeneities. The counter and chamber construction, a functional block-diagram, and a small-angle dispersion characteristics are presented.

ASSOCIATION: Inst. of Chemistry, of Silicates, ANSSSR

Card 1/2



S/048/53/027/003/024/025  
B106/B238

AUTHORS: Gegonov, D. A., and Gogolev, G. P.

TITLE: Proportional counter tubes for X-rays

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya,  
v. 27, no. 3, 1963, 438-445

TEXT: Two proportional counter tubes for X-ray quanta were tested. In both cases the radiation enters through a window 0.2 mm thick in the side wall of the copper cathode, and leaves through a beryllium window 1 mm thick on the opposite side. The anode is a tungsten wire 0.1 mm in diameter. The main difference between the two counters lies in the ratio of the visible part of the anode filament to the diameter of the counter, which is 3:1 for counter 1 and 2:1 for counter 2. This makes it possible to study the way the geometry affects the operation of the tube. A xenon - methane mixture was used as a filler. The efficiency of both counter tubes is 19 % for  $\text{Mo}_{K\alpha}$  and 73 % for  $\text{Cu}_{K\alpha}$  when the absorption in the

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S/048/63/027/003/024/025  
B106/B238

Proportional counter ...

entrance window is taken into account. The pulses are fed from the counter tubes through a pre-amplifier into a YW-2 (USh-2) main amplifier, analysed in a single-channel pulse-height analyzer, and sent on to the counter unit. It was found that the gas amplification factor  $A$  is directly proportional to the voltage on counter tube up to 1900 v for tube 1 and up to 1500 v for tube 2. Changing the voltage by 1 v causes a change in  $A$  of 1 % for both

tubes. The maximum values of  $A$  were  $2 \cdot 10^4$  for counter tube 1, and  $3 \cdot 10^3$  for counter tube 2. The curves of counting rate against voltage exhibit long plateaus in all cases. If the counting rate is varied over a wide range, the end of the plateau for counter tube 1 inclines to smaller voltages as the rates increase. Measuring the resolution of the counter tubes for various energies yielded the following results for the relative half-widths of the peaks:

(theoretical value for  $\text{Cu}_{K\alpha}$  : 13 %);

$\text{Cu}_{K\alpha}$        $\text{Fe}^{55}$

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S/048/63/027/003/024/025  
B106/B238

Proportional counter ...

counter tube 1	15 - 16 %	19 %;
counter tube 2	18 %	20 %.

The resolution in counter tube 2 does not change even at a counting rate of  $10^4$  pulses/sec. Simultaneous measurements on  $\text{Cu}_{K\alpha}$  and  $\text{Fe}^{55}$  with

counter tube 1 showed that it is possible to separate elements with atomic numbers of Z and Z+4. When  $5 \cdot 10^8$  quanta had been counted in the counter tube 1, it was impossible to detect any variation in the energetic resolution or the position of the peaks on the analyzer scale at the same amplification factors and working voltages. There are 9 figures. The most important English-language references are: Park F. G., Scienc. Instrum., 33, 257 (1956); Mulvey T., Campbell A. J., Brit. J. Appl. Phys., 9, 406 (1958).

ASSOCIATION: Spetsial'noye konstruktorskoye byuro rentgenovskoy apparatury (Special Design Office for X-ray Apparatus)

Card 3/3

GOGANOV, D. A.; PORAY-KOSHITS, Ye. A.

"Some new results of applying the method of X-ray scattering at small angles to silicate glasses."

report submitted for 4th All-Union Conf on Structure of Glass, Leningrad, 16-21 Mar 64.

6458-66  
ACCESSION NR: AP5019848

AUTHOR: Yershov, O. A.; Gogorov, D. A.; Lukirskiy, A. P.

TITLE: Investigation of x-ray spectra of silicon in crystalline vitreous quartz and lithium silicate glasses

SOURCE: Fizika tverdogo tela, v. 7, no. 8, 1965, 2355-2361

TOPIC TAGS: silicate glass, lithium glass, quartz, silicon, x ray diffraction study, diffraction grating, absorption spectrum, emission spectrum

ABSTRACT: The authors investigated the LII, III emission and absorption spectra of silicon in quartz and glass for the purpose of determining the relative changes in the state densities and estimating the bandwidths in these solids. The measurements were made with a diffraction-grating spectrometer with sufficiently high resolution ( $\sim 0.2$  ev), described by one of the authors earlier (Lukirskiy, Izv. AN SSSR ser. fiz. v. 25, 913, 1961). The width of the filled states of Si in  $\text{SiO}_2$  was found to be  $12.5 \pm 0.5$  ev. The details of the absorption and reflection spectra of the quartz and the lithium-silicate glasses are determined. The tests have shown that both the emission and the absorption spectra coincide. It is concluded from the rest that the occupied band, the forbidden band, and the conduction band of Si have the same shape and positions, and consequently are determined

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nw  
Card 2/2

L 6458-66  
ACCESSION NR: AP5019848

6  
by the short-range order of the surrounding of the Si atom (one coordination sphere). The values obtained for the occupied and forbidden bands are  $12.5 \pm 0.5$  and  $7 \pm 0.5$ . The fact that the extensive fine structure of the absorption spectra coincides for the investigated substances indicates that the absorption fine structure is governed essentially by the first coordination sphere of silicon. This deduction agrees with the short-range order theory. "The authors thank A. A. Petrov for help in preparing the samples." Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: 23 Feb 65

ENCL: 00

SUB CODE: SS, OP

NR REF SOV: 005

OTHER: 006

nw  
Card 2/2

L 11843-66 EWT(1)/EWP(e)/EWT(m)/EWP(b) LHB/GS/WH

ACC NR: AT6000474

SOURCE CODE: UR/0000/65/000/000/0100/0104

AUTHOR: Goganov, D. A.; Poray-Koshits, Ye. A.

ORG: None

TITLE: Chemically inhomogeneous structure of some silicate glasses as determined by the small-angle x-ray scattering method

SOURCE: Vsesoyuznoye soveshchaniye po stekloobraznomu sostoyaniyu. 4th, Leningrad, 1964. Stekloobraznoye sostoyaniye (Vitreous state); trudy soveshchaniya. Leningrad, Izd-vo Nauka, 1965, 100-104

TOPIC TAGS: lithium glass, borate glass, silicate glass, x ray scattering

ABSTRACT: The most important parameter characterizing the inhomogeneous structure of samples in the small-angle x-ray scattering method is the mean square difference between the electron densities of the inhomogeneous regions,  $(\Delta\rho)^2$ . This quantity quantitatively determines the degree of inhomogeneity of samples. The authors determined the values of  $(\Delta\rho)^2$  for soda-silica and lithia-silica glass at various contents of  $\text{Na}_2\text{O}$  and  $\text{Li}_2\text{O}$ . As the alkali content rises,  $(\Delta\rho)^2$  decreases, i.e., the glasses become increasingly more homogeneous, but the data do not indicate at what composition they should become completely homogeneous. The temperature dependence of  $(\Delta\rho)^2$  was found to be pronounced. As the radius of the alkali metal cation increases,  $(\Delta\rho)^2$  decreases. Results obtained with three-component glasses containing various amounts of  $\text{SiO}_2$ ,  $\text{B}_2\text{O}_3$ , and  $\text{Na}_2\text{O}$ , and glasses containing  $\text{SiO}_2$ .

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L 11843-66

ACC NR: AT6000474

Na<sub>2</sub>O, and BaO or CaO are discussed. Authors express their deep appreciation to V. S. Molchanov for the glass samples which he kindly supplied. Orig. art. has: 2 figures and 1 table.

SUB CODE: 11, 20 / SUBM DATE: 22May65 / ORIG REF: 009 / OTH REF: 005

HW  
Card 2/2



L 15169-66 EWP(e)/EWT(m)/EWP(b) WH  
ACC NR: AP6002418 (A) SOURCE CODE: UR/0020/65/165/005/1037/1040

AUTHOR: Goganov, D. A.; Poray-Koshits, Ye. A.

ORG: Institute of Chemistry of Silicate im. A. V. Grebenshikov, Academy of Sciences, SSSR (Institut khimii silikatov Akademii nauk SSSR)

TITLE: Change in the supermolecular structure of sodium-silicate glass when it is heated

SOURCE: AN SSSR. Doklady, v. 165, no. 5, 1965, 1037-1040

TOPIC TAGS: silicate glass, x ray scattering, molecular structure, heating

ABSTRACT: The method of x-ray scattering at small angles was used in glass with 14 mol% Na<sub>2</sub>O heated in a gradient furnace in the 570-790° temperature range for 2.5 hours in order to study the supermolecular (submicroscopic) structure of sodium-silicate glass as a function of heat treatment. One glass specimen was heated for one-half hour to study the degree of structurization. The specimens were air-cooled, ground to a thickness of 0.2 mm and curves for the intensity of x-ray scattering at small angles were plotted for 30 points throughout the temperature interval. The

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UDC: 539.213:539.26+54-161.6

2

L 15169-66

ACC NR: AP6002418

curves were corrected to conform with experimental conditions, and the following structural characteristics of the glass were calculated: 1) radii of the spherical regions of nonhomogeneities; 2) the generalized area of the interface between these regions and the surrounding matrix; and 3) the mean square fluctuation in electron density for points where the radii of the spherical nonhomogeneous regions are no greater than 300 Å. In the region from 580 to 710°, the radii of the nonhomogeneous regions increased with temperature from 115 to 730 Å. Between 710 and 770°, the x-ray scattering curves show two types of regions: one with maximum radii of 730 Å and the other with radii of less than 100 Å. Only one type of region was observed above temperatures of 770° with radii of very close to 90 Å. When the glass was heated in a gradient furnace for one-half hour, the dimensions of nonhomogeneous regions at approximately 600° were noticeably smaller. This difference decreased with an increase in temperature, which is due to a reduction in the viscosity of the glass and acceleration of diffusion processes. Curves are given showing the logarithm of x-ray scattering intensity as a function of the logarithm of the scattering angle. These curves show a linear relationship with a slope of -3, a gradual increase in the size of the regions with an increase in temperature of 575 to 710°, the appearance and development of a bidisperse structure (727 and 765°), a gradual reduction in the number of large regions without any change in their dimensions and

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L 15169-66  
ACC NR: AP6002418

an increase in the number of small regions, and finally a disappearance of the large regions while the small regions remain (780°). The generalized surface of the interface between the nonhomogeneous regions and the surrounding matrix decreases as the temperature is raised. At 770° the area of the interface is extremely small, but a further increase in temperature causes a sharp jump in this area to values which indicate a generalized interface for small nonhomogeneity regions. Curves are given showing the changes in the parameters studied when the glass is heated in the temperature interval from 575 to 790°. The dissimilarity in the slopes of the curves for the radii of the nonhomogeneous regions and the area of the interface indicates that changes in the supermolecular structure of the glass are due mainly to an enlargement in the regions of nonhomogeneity without any noticeable change in their composition or total volume. Orig. art. has: 2 figures.

SUB CODE: 11,20/ SUBM DATE: 15Apr65/ ORIG REF: 009/ OTH REF: 000

Card 3/3

L 26040-66 EWT(m)/EWP(e) WH

ACC NR: AP6013895

SOURCE CODE: UR/D020/66/167/006/1266/1268

AUTHOR: Gogany, D. A.; Poray-Koshits, Ye. A.

ORG: Institute of Chemistry of Silicates im. I. V. Grebenshchikov (Institut khimii silikatov)

TITLE: Liquation characteristics of the chemically nonhomogeneous structure of low-alkali sodium silicate glasses

SOURCE: AN SSSR. Doklady, v. 167, no. 6, 1966, 1266-1268

TOPIC TAGS: silicate glass, electron density, glass liquation

ABSTRACT: A collimation system with high resolution is used for determining the mean square value of fluctuations in electron density for low-alkali sodium silicate glasses up to the liquation temperature. Experimental and theoretical curves are given showing the mean square value of fluctuations in electron density as a function of composition in these glasses at various temperatures. The experimental and theoretical data show satisfactory agreement. When the glass is cooled, it passes quickly through the liquation region and stratifies with the formation of a fine structure which may be combined with a coarse structure. It was experimentally found that the radii of nonhomogeneous regions and the mean square fluctuation in electron density which characterize the glass structure are considerably dependent upon cooling rate.

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UDC: 666.1:542.65

L 26040-66

ACC NR: AP6013895

The results of the work support the hypothesis of a liquation origin for high-temperature fine structure as opposed to the fluctuation hypothesis proposed by Filipovich (V. N. Filipovich, Collection, Structural Transformations in Glasses at High Temperatures, Nauka, 1965). Orig. art. has: 3 figures.

SUB CODE: 11/

SUBM DATE: 10Jul65/

ORIG REF: 011/

OTH REF: 000

Card 2/2 *PB*

GOGANOV, K. (Riga)

Accounting for tool rooms. Bukhg. uch. 15 no.8:28-32 1g '56.  
(MLRA 9:10)

1. Glavnyy bukhgalter remontno-mekhanicheskogo zavoda  
"Mintransstroya"  
(Toolroom practice)

GOGANOV, V.A.; KROPACHEV, A.M.

Using correlation analysis in solving some geochemical problems  
as revealed by the study of a molybdenum deposit in eastern Trans-  
baikalia. Geokhimiia no.2:184-186 '62. (MIRA 15:3)  
(Transbaikalia--Ores--Analysis)

GOGASZ, Nowalany; GOGACZ, Jan

Effect of isonicotinic acid hydrazide on permeability of tissues and blood vessels. Gruzlica 23 no.2:81-87 Feb '55.

1. Z Kliniki Gruzlicy A.m. we Wroclawiu. Kierownik: docent dr.med. T. Gartinski, i z Sanatorium Przeciwgruzliczego P.K.P. w Szklarskiej Porębie Dolnej Dyrektor: dr m. Mostowski. (W pracach laboratoryjnych brala udzial asyst.tech. B.Urbaniowicz) Szklarska Preba Dolna, Sanatorium PKP.

(NICOTINIC ACID ISOMERS, effects

isoniazid on blood vessel & tissue permeability)

(OSMOSIS AND PERMEABILITY

permeability of blood vessels & tissues, eff. of isoniazid)

(BLOOD VESSELS, physiology

permeability, eff. of isoniazid)



GOGATISHVILI, A. D.

GOGATISHVILI, A. D. - "The soils of Sachkhere district and their productivity for vine-growing." Tbilisi, 1957. Published by the Acad Sci Georgian SSR. Georgian Order of Labor Red Banner Agricultural Inst. (Dissertation for degree of Candidate of Agricultural Sciences.)

SO: Knishnava letopis', No 48. 26 November 1957. Moscow.

GOGATISHVILI, A.D.

Data on the study of soils containing excessive manganese. Soob.  
AN Gruz.SSR 16 no.1:47-54 '55. (MIRA 8:12)

1. Akademiya nauk Gruzinskoy SSR, Institut pochvovedeniya, agro-  
khimii i melioratsii, Tbilisi. Predstavleno chlenom-korrespondentom  
Akademii M.N.Sabashvili

(Minerals in soils)

GOGATISHVILI, A.D.; MARUASHVILI, L.I.

Fossil soils of the eastern margin of the southern Georgian volcanic upland. Uch. zap. AGU. Ser. geol. -- geog. nauk no.3:79-96 '63.

(MIRA 17:11)

GOGATISHVILI, A.D.

Fossil soil in the eastern outskirts of the Mukhrani Trough.  
Soob. AN Gruz. SSR 33 no. 2:421-428 F '64. (MIRA 17:9)

ACC NR: AR6032143

SOURCE CODE: UR/0169/66/000/006/A037/A037

AUTHOR: Khvedelidze, N. S.; Gogatishvili, Ya. M.

ORG: none

TITLE: Several regularities in short-period oscillations of of the geomagnetic field

SOURCE: Ref. zh. Geofizika, Abs. 6A239

REF SOURCE: Sb. Nekotoryye vopr. issled. elektromagnitn. polya Zemli. No. 1(23). Tbilisi, Metsniyereba, 1965, 25-31.

TOPIC TAGS: short period oscillation, solar ultraviolet radiation, corpuscular stream, geomagnetic field, *GEOMAGNETIC DISTURBANCE*

ABSTRACT: Regularities in the distribution of geomagnetic short-period oscillations Pc and Pt are studied from data of the fluxmeter station at the Dushati Geophysical Observatory during the period from 1 June 1957 to 30 June 1961. The period of Pc oscillations lasts from 10 to 30 sec and the period Pt oscillations from 50 to 100 sec. Pc oscillations appear in the morning for several hr with a maximum amplitude of 0.1 γ. Pt oscillations appear at night in the form of pulses or slow variations. The Pc have a diurnal rate with a maximum from 0800 to 1600 hr, local time. The Pt have a maximum amplitude from 1700 to 2300 hr universal time. The ascending

UDC: 525.241

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ACC NR: AR6032143

and descending branches of the Pc-curve are symmetric to their maximum. The time of the maximum shifts seasonally: in summer it occurs from 1000 to 1200 hr, in the equinoxes from 1200 to 1500 hr, and in winter from 1500 to 1800 hr, local time. The Pt have no diurnal or seasonal rates. Pc oscillations occur most often in summer and less often in winter. The maximum Pt occurrences take place in March and October and the minimum in summer. The Pc are caused by solar ultraviolet radiation and the Pt by corpuscular streams.

SUB CODE: 08/ SUBM DATE: none

Card 2/2

BERISHVILI, G. P.; KHVEDELIDZE, N. S.; GOGATISHVILI, Ya. M.

Study of the microstructure of baylike disturbances. Trudy  
Inst. geofiz. AN Grus. SSR 20:13-18 '62.

(MIRA 16:1)

(Magnetic storms)

25(5)

PHASE I BOOK EXPLOITATION

SOV/3080

Gomelaury, Nikolay Georgiyevich, Nikolay Vasil'yevich Kashakashvili,  
Solomon Avtandilovich Sharadzenidze, Viktor Viktorovich Sereda,  
and Georgiy Lukich Gogava

Zakavkazskiy metallurgicheskiy zavod imeni I. V. Stalina (Zakavkazskiy  
Metallurgical Plant imeni I. V. Stalin) [Moscow] Metallurgizdat,  
1959. 147 p. 3,000 copies printed.

Ed.: N. G. Gomelaury, Candidate of Technical Sciences; Ed. of  
Publishing House: L. M. Gordon; Tech. Ed.: A. I. Karasev.

PURPOSE: This book is intended to acquaint metallurgical workers  
and the general public with the design and operation of metal-  
lurgical plants.

COVERAGE: The book deals with the history and development of the  
Zakavkazskiy Metallurgical Plant imeni Stalin in Rustavi,  
Georgian SSR. Construction of individual departments and organi-  
zation of production are described. The question of technical pro-

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Zakavkazskiy Metallurgical (Cont.)

SOV/3080

gress and labor productivity is examined. The introduction of progressive technological processes in blast-furnace and steel-making shops, in tube and rolling mills, and in the production of wire and merchant bars is discussed. No personalities are mentioned. There are no references.

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VK/mmh  
2-15-60

L 46120-66 ENT(1)/EEC(k)-2/T IJP(c)

SOURCE CODE: UR/0251/66/042/003/0547/0550

ACC NR: AP6024547

AUTHOR: Gogava, L. A.; Nakashidze, G. A.; Delerzon, N. M.; Dzhaparidze, Ye. G.;  
Kakhabrishvili, I. V.; Ter-Sarkisova, A. G.

ORG: Academy of Sciences, Georgian SSR, Institute of Cybernetics (Akademiya nauk  
Gruzinskoy SSR, Institut kibernetiki)

TITLE: Photoelectric characteristics of a two-terminal p-n-p-n type transistor switch

SOURCE: AN GruzSSR. Soobshcheniya, v. 42, no. 3, 1966, 547-550

TOPIC TAGS: electronic switch, germanium transistor, photosensitivity, volt ampere  
characteristic, pn junction, photoelectric property

ABSTRACT: The article deals with the method of fabrication and photoelectric characteristics of germanium-base p-n-p-n type transistor switches. The starting material was a p-type wafer with a resistivity of 5 ohms·cm and dimensions of 1.3x1.3x0.08 mm. Two p-n junctions were obtained by diffusing antimony into both surfaces of the original wafer and the third, by alloying indium into one of the diffused layers. Ohmic contact on the opposite side was accomplished by doping with tin (Fig. 1). In the presence of a fixed bias lower than the switching

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more devices

L 46120-66

ACC NR: AP60245-17

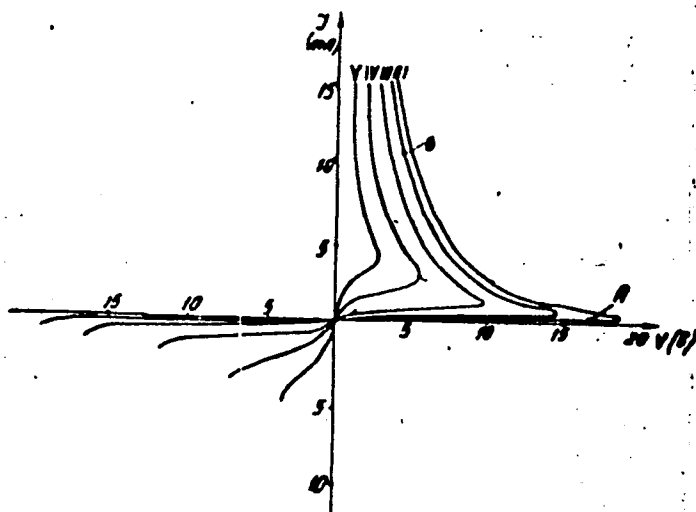


Fig. 2. V-I characteristic of p-n-p-n switch in the presence of varying degrees of illumination:

I - darkness; II - illumination of 460 lux; III - 920 lux; IV - 1840 lux; V - 2760 lux; VI - 5060 lux

of this kind with a switching time of less than  $10^{-6}$  sec. Orig. art. has: 5 figures and 1 table.

SUB CODE: 09,20/

SUBM DATE: 25Jun65/

ORIG REF: 002/

OTH REF: 001

Card 3/3

CHIKHLADZE, Georgiy Yevseyevich; MESKHI, Ketevan Georgavna;  
GAPRINDASHVILI, David Solomonovich; GOGAVA, Levon  
Aleksandrovich

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COLOVA, L.A., aspirant

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Izv. vys. ucheb. zav.; mashinostr. no.2:55-60 '64.

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1. Gruzinskiy politekhnicheskiy institut.



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210 P '58. (MIRA 11:7)

1. Tbilisskiy gosudarstvennyy universitet im. I.V.Stalina. Predstavleno  
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(Serpents)

(Skull)

1. B. M. ...

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(MIFA 18:2)

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GOGEBASHVILI, N.V.

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1. Tbilisskiy gosudarstvennyy meditsinskiy institut, kafedra mikrobiologii. Predstavleno akademikom A.D.Zurabashvili. (PHAGOCYTOSIS) (X RAYS--PHYSIOLOGICAL EFFECT) (BACTERIOPHAGE)

GOGEBASHVILI, Nodar Vladimirovich

[Effect of ionizing radiation on the immunobiological  
states of the organism] [Vliianie ioniziruiushchego iz-  
lucheniia na immunobiologicheskoe sostoiianiiia organizma.  
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465. OPERATION OF A PYRIDINE PLANT. Chakravarty, B. K.,  
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 standard procedure, mother liquor from the ammonia saturator and neutralized  
 with ammonia to hydrolyze the pyridine sulfate they contain. The top  
 pyridine, ammonia, and steam pass to the dephlegmator, under a  
 separator, while the bottom liquor containing the pyridine, in  
 complex, are routed to a separate plant. Substitution of a column  
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 raises the steam economy.

87M  
 M

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MONICH, V.K.; GOGELI, G.N., prof., doktor geologo-mineralogicheskikh  
nauk, inzhener-geolog

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GOGEL', G.N.

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no. 1:74-82 '62. (MIRA 15:5)  
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MON: [unclear]; STAROV, V.I.; GOGEL', G.N.

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Petr Ivanovich; ZLOTIN, Vladimir Isaakovich; SVEDEL',  
I.S., kand. tekhn. nauk, dots., retsenzent; GOGEL', I.B.,  
inzh., retsenzent; GOL'DSHTEYN, A.G., inzh., retsenzent

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GOGEL', Zhan

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Fire in the storage of agricultural chemicals. Pozh.delo 6  
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(Agricultural chemicals)

(Farm buildings--Fires and fire prevention)

MARDANOV, M.A.; MARKHASEVA, S.M.; VELIYEV, K.G.; GOGEL'GANS, R.G.;  
BIZIYAYEVA, N.P.

Fire and explosion hazards of certain aliphatic nitro compounds.  
Azerb.khim.zhur. no.1:5-10 '61. (MIRA 14:8)  
(Nitro compounds) (Fire prevention)

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GOGELIYA / USSR / Farm Animals. Silkworm.

2-6

Abs Jour: Zhur-Biol., No 12, 1958, 54885.

Author : Gvinepadze, Sh. K., Gogeliya, Ye. F.

Inst : Not given.

Title : On the Problem of the Conditions of Incubation  
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of the Mulberry-Feeding Silkworm.

Orig Pub: Byul. nauchno-tekhn. inform. Gruz. n.-i. in-ta  
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Abstract: No abstract.

Card 1/1

66

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matem. nauk, otv. red.; GOGESHVILI, E. red.; SAGARADZE, Sh.,  
tekhn. red.

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(Gravitation) (Orbits)



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Meteoropathological reactions in the clinic of internal  
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DZHIKIYA, L.P.; GOGIBEDASHVILI, R.K.

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processes in nonspecific diseases of the lungs in the climate  
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GOGIBEDASHVILI, V. G. Doc Med Sci -- (diss) "On the Problem of  
the ~~THEORETICAL~~ UHF Electromagnetic Field <sup>Treatment</sup> Therapy of ~~patients~~  
~~Suffering~~ Chronic Gastritis <sup>Patient</sup> (Clinical-Experimental Study). Tbilisi,  
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Treatment of hypertension by inductothermy (short-wave diathermy).  
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1. Iz Nauchno-issledovatel'skogo instituta kurortologii i fizioterapii  
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(HYPERTENSION)  
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Some problems in the climatic classification of health resorts in the U.S.S.R.; critical comments on L.A.Chubukov's and E.M.II'icheva's article "Basic principles for the classification of climatic health resorts in the U.S.S.R." Vop: kur., fizioter. i Lech. fiz. kul't. 24 no.6:547-551 M-D '59. (MLA 15:1)

1. Iz Instituta kurortologii Gruzinskoy SSR (dir. - prof. V.G. Gogibedashvili).  
(HEALTH RESORTS, WATERING PLACES, ETC.)



GOGIBEDASHVILI, V.G., prof.; USHVERIDZE, G.A., kand.med.nauk

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79-80 '62. (MIRA 15:5)

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GOGIBEDASHVILI, V.G., doktor med. nauk, prof.

Problems of medical climatology and climatotherapy. Sbor.  
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Scientific fundamentals of the organization and arrangement  
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Reactions to the weather in cardiovascular disease patients  
under the climatic conditions of the Kobuleti health resorts.  
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1. Direktor Gosudarstvennogo nauchno-issledovatel'skogo  
instituta kurortologii i fizioterapii Ministerstva  
zdravookhraneniya Gruzinskoy SSR.

GOGIBEDASHVILI, V.G.; CHILINGARISHVILI, Ye.I.; YAKALOV, S.I.

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1. Institut kurortologii i fizioterapii Gruzinskoy SSR, Tbilisi.

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red.

[Healing waters of Tskhaltubo] Tselebnye vody Tskhaltubo.  
Tbilisi, Sabchota Sakartvelo, 1965. 32 p. (MIRA 1818)

GOGIBERIDZE, A.A., kandidat sel'skokhozyaystvennykh nauk; FOGHL', A.N.

Raising chayote. Priroda 42 no.11:110-111 M '53.

(MIRA 6:11)

1. Vsesoyuznaya selektsionnaya stantsiya vlashno-subtropicheskikh kul'tur  
(Sukhum<sup>1</sup>) (for Fogel).

(Chayote)

BOKAREVA, L.I.; GOGIBERIDZE, A.A.; FOGEL', A.N.

~~СОВЕТСКО-КАПЕШТАТ-РАЙОН~~  
Cultivation of turmeric in the Soviet subtropics. Agrobiologika  
no.4:136-139 J1-Ag '58. (MIRA 11:9)

1. Sukhumskaya opytnaya stantsiya subtropicheskikh kul'tur  
Vsesoyuznogo instituta rasteniyevodstva.  
(Turmeric)

GOGIBERIDZE, E. P.

USSR/Chemistry

Card : 1/1

Authors : Nogaydeli, A. I., and Gogiberidze, E. P.

Title : Reaction of magnesiumbromodimethylacetylenilcarbinol with o-salicylaldehyde

Periodical : Zhur. Ob. Khim., 24, Ed. 6, 1044 - 1045, June 1954

Abstract : The reaction of magnesiumbromodimethylacetylenilcarbinol with o-salicylaldehyde, resulted in the synthesis of a new phenol alcohol: 1-o-hydroxyphenyl-4-methylpentyne-2-diol-1, 4. This compound, when heated to a temperature of 100 , acquires a rose-color and during further temperature increases, it changes into violet and finally brown color. The very same change in color is observed during the storage of the crystal for a period of 3-4 months. Three references.

Institution : The I. V. Stalin State University, Tbilisi

Submitted : November 26, 1953

GOGIBERIDZE, G. D.

Gogiberidze, G. D.: "Results of surgical treatment of persistent  
gunshot contractures of the ischium," (Report), Trudy III Zakavkazak.  
s"yezda khirurgov, Yerevan, 1948 (on cover: 1949), p. 510-514.

SO: U-5240, 17 Dec. 53, (Letopis 'zhurnal 'nykh Statey, No. 25, 1949).



GOGIBERIDZE, O.S.

Functional state of the pancreas in patients with ulcers.  
Soob. AN Gruz. SSR 27 no.6:785-791 D '61. (MIRA 15:2)

1. Tbilisskiy gosudarstvennyy meditsinskiy institut.  
Predstavleno akademikom K.D.Eristavi.  
(ALIMENTARY CANAL--ULCERS)  
(PANCREAS)

KEKELIDZE, M.A.; GOGIBERIDZE, Yu.M.

Deoxidation of pipe grades of steel by silicomanganese prepared  
from washed, fourth-grade, Chiatura manganese ore. Trudy Inst.  
met. AN Gruz. SSR vol. 13:25-31 '62. (MIRA 17:9)

GOGIBERIDZE, Yu.M.; KEKELIDZE, M.A.; MIKIASHVILI, Sh.M.

Effect of phosphorus on the surface tension and density of  
iron. Soob. AN Gruz. SSR 31 no.1:125-130 J1 '63. (MIRA 17:7)

1. Institut metallurgii AN Gruzinskoy SSR. Predstavleno akademikom F.N. Tavadze.

GOGIBERIDZE, Yu.M.; KEKELIDZE, M.A.; MIKIASHVILI, Sh.M.

Interfacial tension at the boundary separating Fe-F alloys from  
MnO- SiO<sub>2</sub> melts. Soob. AN Gruz. SSR 32 no. 1:117-124 0 '63.  
(MIRA 17:9)

1. Institut metallurgii AN GruzSSR, Tbilisi. Predstavleno  
akademikom F.N.Tavadze.

MIKIASHVILI, Sh.M.; GOGIBERIDZE, Yu.M.

Interphase tension and adhesion at the interface between  
iron-silicon alloys and melts in the system manganous oxide -  
alumina - silica. Soob. AN Gruz. SSR 38 no. 3:607-613  
Je '65. (MIRA 18:12)

1. Gruzinskiy institut metallurgii, Tbilisi. Submitted Sept. 1,  
1965.

GAIKINDASHVILI, V.N.; GOGIASHVILI, L.K.

Nitric acid treatment of Georgian serpentinites. Dokl. AN Gruz.  
SSR 38 no.2:295-301 My '65. (MIA 18:9)

1. Institut prikladnoy khimii i elektrokhemii AN GruzSSR.  
Submitted August 15, 1964.

COGICHAISHVILI, I. F., Engineer

"Distribution of Electric Power in City Areas of Low Buildings."  
Sub 29 May 51, Academy of Communal Economy imeni K. D. Jamfilov

Dissertations presented for science and engineering degrees in  
Moscow during 1951.

SC: Sum. No. 480, 9 May 55

GOGI CHAESHVILI, P. F.

Electrical Engineering Abstracts  
May 1954  
Distribution

①  
1945. Erection of urban distribution systems by stages. P. F. GOGI CHAESHVILI. *Elektrichestvo*, 1953, No. 8, 11-13. In Russian.

The development of urban distribution systems on the basis of a gradual increase of the theoretical area load density is considered. This requires a gradual increase in the number of transformer substations, in order to remain within given limits of economic current density and permissible voltage drops. The problem is almost entirely one of electrical economics. The projecting work is explained on a sector of a 380/220 V system actually installed and the development plan is given in tables and graphs of transmitting capacity and costs compared with the curve of "normal erection."

B. F. KRAUS



GOGICHAISHVILI, P.F.

112-2-3113

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957, Nr 2, p. 84 (USSR)

AUTHOR: Gogichaishvili, P.F.

TITLE: Determining the Capacity of Network Transformer Points (Opredeleniye moshchnosti setevykh transformatornykh punktov)

PERIODICAL: In sbornik: Vopr. postroyeniya gor. elektr. setey. Moscow, M-vo kommun. kh-va RSFSR, 1956, pp. 111-133

ABSTRACT: Existing formulae for determining the optimal capacity for transformer points (TP) are all based on the assumption of constant voltage losses in the network. They are unsuitable in calculating the economical current density for a network. For a given economical current density  $j$ , the following formula is proposed for determining the most advantageous TP capacity:

$$P_j = \sqrt{\frac{I_T t D}{\frac{\delta_T K}{\sqrt{30} j} + \frac{n j C \tau}{\sqrt{30} \gamma}}}$$

where  $I_T$  is a part of the yearly operating costs in rubles which is compiled from deductions from the cost of the TP which is a function of its capacity;  $t$  is the number of main power lines;  $D$  is the line load density in kw/m;  $\delta_T$  is the shares of the yearly deductions from the cost of the TP;  $K_{II}$  is the part of the cost

Card 1/2

112-2-3113

Determining the Capacity of Network Transformer Points (cont)

of the low voltage network of ... one transformer point in rubles per m per sq mm; this is a function of the line conductor gage (cross section area); U is the line voltage of a three phase network in volts;  $\eta$  is a coefficient which takes account of the relation of the change in energy losses to the change in the configuration of the network and the load distribution; c is the cost of energy losses in rubles/kw hr;  $\gamma$  is the specific conductance of the conductor in mhos /sq mm ;  $\tau$  is the loss time in hr/yr. In designing a network for an economical current density, a deviation of the TP from optimal capacity will be reflected to a lesser extent on the economic performance of the network than when basing the design on voltage losses. Charts are given for rapidly determining the most advantageous TP capacity depending on various economic parameters.

Ya.M.Ch.

Card 2/2

GOGICHASHVILI, P.F.

31. METHOD OF CALCULATING URBAN DISTRIBUTION SYSTEMS. P.F. Gogichashvili. Elektrichestvo, 1955, No. 7, 43-6. In Russian.

The selection of the optimum rating of transformer stations should be made according to the daily losses, considering those in all branches of the system. By this method the theoretical optimum rating of transformer multiplications is greater by a factor of 1.55 than if the calculation is based on capital losses, and at the design stage it should be assumed to be about twice as large. An increased rating is particularly recommended where the load densities are high. The validity of the theory is confirmed by data collected in many towns. The favourable aspects of the increasing use of single-phase distribution are emphasized.

GOGICHAISHVILI, P.F.

105-8-15/20

AUTHOR

IOKHVIDOV, Eng. E.S., KLIONSKAYA, R.I. Eng., BURGSDORF, V.V., D. tech. sc.,  
Prof., GOGICHAISHVILI, P.F., Cand. tech. sc., GLAZUNOV, A.A., D. tech. sc.,  
Prof.

TITLE

Urgent Problems of the Theory of Urban Networks  
(Neotlozhnyye zadachi teorii gorodskikh setey. Russian)  
Elektrichestvo, 1957, Nr 8, pp 67 - 72 (U.S.S.R.)

PERIODICAL

ABSTRACT

The attitudes of the first four above-mentioned scientists to the article by A.A. Glazunov in Elektrichestvo, 1956, Nr 7, are given. Iokhvidiv does not agree with Glazunov's opinions and he thinks that it is better to lay 1 - 2 cables of 110 V each instead of a bundle of 35 V each. He reproaches Glazunov that he only causes confusion, that his opinion on the use of 220/127 V in towns has to be delt with due reserve, that all towns except Moscow already pass over to 380/220 V. Klionskaya believes that a change to 380/220 V voltage is hardly noticed by the consumers and that every one will continue to use his accustomed lamp. Burgsdorf and Gogichaishvili think that each type of voltage has its advantage and deficiencies. Glazunov answers all reproaches and the criticism of his paper. He is of the opinion that an economical use of the 220/127 V voltage is only possible in towns with districts where 5 - 12 story high houses exist. He thinks that the problem of a use of two voltages, namely 220/127 and 380/220 V, should be seriously examined. Iokhvidov's reproaches he rejects.

Card 1/2

105-8-15/20

Urgent Problems of the Theory of Urban Networks

item for item as not valid and not honest.  
(2 Slavic references).

ASSOCIATION

~~Moscow~~, Institute of Energy of the Academy of Sciences of the Belorussian SSR, - ~~All-Union~~ Polytechnical ~~Correspondence~~ Institute, Moscow Institute of Power Engineering  
(Institut energetiki Akademii nauk Belorusskoy SSR, - Vsesoyuznyy zaochnyy politekhnicheskiy institut, - Moskovskiy energeticheskiy institut)

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SUBMITTED  
AVAILABLE

Library of Congress

Card 2/2

28(1)

PHASE I BOOK EXPLOITATION

SOV/2340

Gogichaishvili, Pavel Filippovich

Kondensatornyye ustroystva v skhemakh releynoy zashchity i avtomatiki  
(Capacitor Devices in Circuits for Relay Protection and Automatic  
Control) Moscow, Izd-vo M-va kommunal. khoz. RSFSR, 1959. 116 p.  
Errata slip inserted. 6,000 copies printed.

Ed.: F.F. Vorontsov; Ed. of Publishing House: V.M. Yaroshevskiy;  
Tech. Ed.: I.T. Rakitin.

**PURPOSE:** This book is intended for engineering and technical personnel engaged in the design and operation of electrical equipment. It may also be used as a textbook for senior students of power-engineering and polytechnic vuzes in the study of relay protection and automatic control.

**COVERAGE:** The author presents basic information on capacitor devices and discusses methods of selecting their components. He also describes the use of capacitor devices in relay protection circuits and automatic control systems for electrical equipment of up to

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# Capacitor Devices in Circuits (Cont.)

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220 kv. Numerical examples of calculating capacitors, semi-conductor rectifiers and transformers are also presented. The author thanks F.A. Stupel', I.S. Bessmertnyy, M.I. Tsarev, V.L. Kozis, A.I. Darevskiy, Candidates of Technical Sciences, and Professor V.V. Burgsdorf, Doctor of Technical Sciences, for reviewing the text. There are 50 references, all Soviet.

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